

## A CONTRIBUTION TO THE SYSTEMATICS OF SOME WEST INDIAN *LATIRUS* (GASTROPODA: FASCIOLARIIDAE)

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### ABSTRACT

*Some West Indian members of the taxonomically difficult genus Latirus are considered. The two most common species, generally recognized as Latirus brevicaudatus (Reeve, 1847) and L. mcgintyi Pilsbry, 1939, are highly polymorphic and have been described in the literature under a number of names; due to the present confusion surrounding these species, some nomenclatorial changes appear necessary, and they are herein called Latirus angulatus (Röding, 1798) and L. cariniferus (Lamarck, 1816), respectively. Latirus (Polygona) bernadensis from Barbados is introduced as a new species; Latirus (Polygona) nematus Woodring, 1928, originally described from the Bowden Formation, Jamaica, is noted for the first time as a member of the Recent fauna.*

### INTRODUCTION

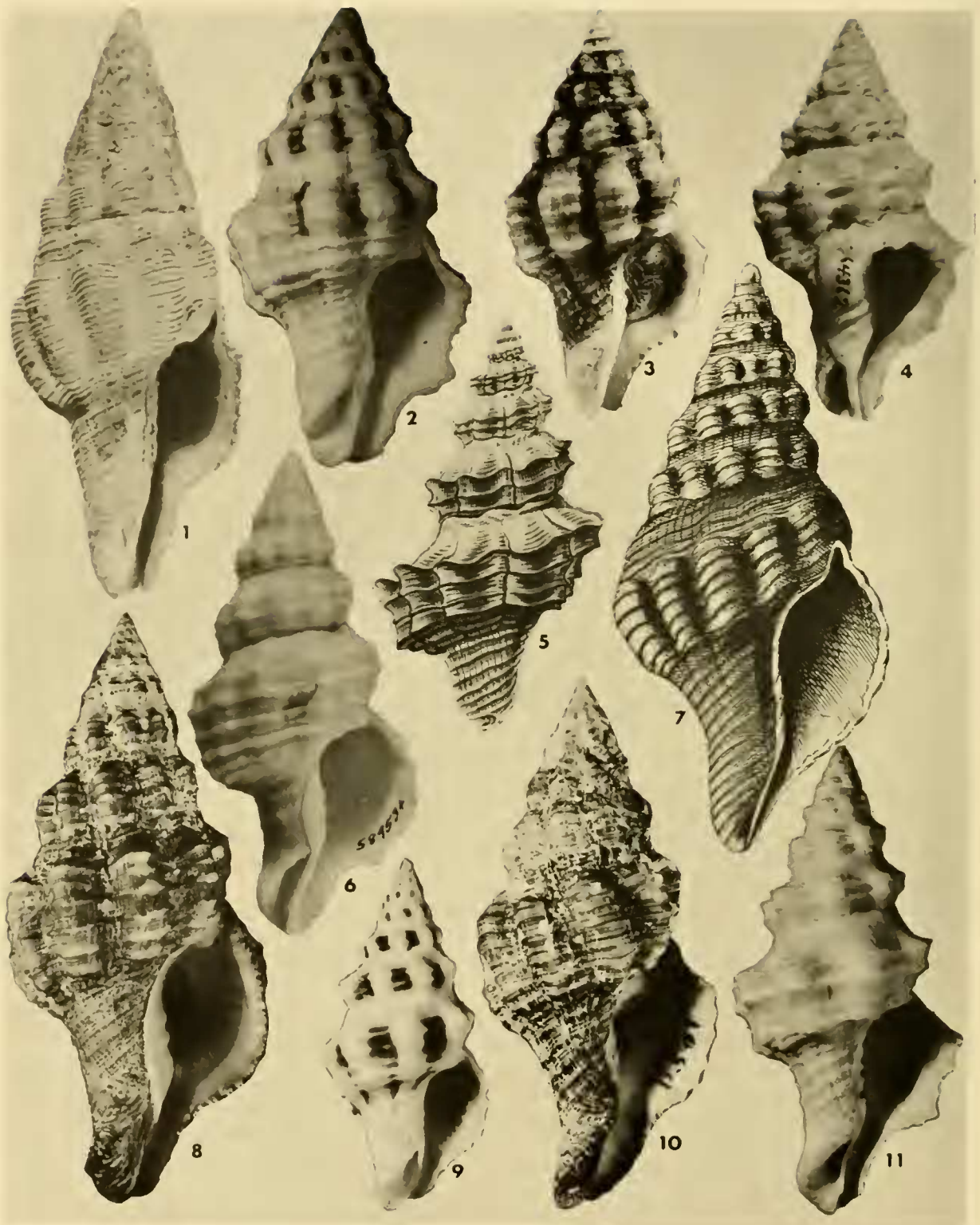
While studying the fascioliid genus *Latirus* in the western Atlantic, some conclusions have been reached pertaining to the subgenera *Latirus s.s.* and *Polygona* and these results are presented in this paper. It is hoped that a monograph covering all the West Indian species of the genus will be completed in the near future.

The genus *Latirus* includes a variety of fascioliid species characterized by being spindle-shaped, generally rather heavy-shelled, and with prominent folds on the columella. The great diversity of form has encouraged some authors to create generic and subgeneric names, and some of these appear to be very useful in an evolutionary treatment of the group.

Among the Peristerniinae, the group most closely related to *Latirus* is also composed of diverse members and is well represented in the New World by the genus *Leucozonia*. The latter group can be distinguished from *Latirus* by its more open siphonal canal, which actually forms the lower portion of the aperture; also, there is an interesting difference in the radula, the small node or cusp on the medial end of the lateral tooth being greatly reduced or absent in *Leucozonia*. Some, but not all, *Leucozonia* possess a tooth on the outer lip at the base of

the aperture. For these reasons, the genus *Leucozonia* [type species *Leucozonia nassa* (Gmelin) from the West Indies] includes *Leucozonia ocellata* (Gmelin), also Caribbean, and *Leucozonia cerata* (Wood), *L. rudis* (Reeve), and *L. tuberculatus* (Broderip) from the eastern Pacific. While some of these generic combinations were noted by Keen (1971) in her treatment of eastern Pacific Mollusca, *rudis* was incorrectly considered to belong to *Latirus*.

Other Peristerniinae similar to *Latirus*, but apparently more closely related to *Leucozonia*, include: the Indo-Pacific *Latirolagena smaragdula* (Linnaeus) and the eastern Pacific *Opeatostoma pseudodon* (Burrow) which have a typical *Leucozonia*-type radula; and "*Latirus*" *amplustris* (Martyn), from the Indo-Pacific. It should be mentioned here that the generic differences noted above indicate that the radula of *Latirus gibbulus* (Gmelin), the type species of the genus *Latirus*, will prove to be of the *Leucozonia*-type. The heavy shell of *Latirus gibbulus*, its reduced spiral and axial sculpture, and its open siphonal canal indicate a likely *Leucozonia* affinity. Should the radula of *L. gibbulus* be found to be that of a *Leucozonia*, it would certainly pose an interesting problem concerning the correct generic names for the species presently considered to be *Latirus* and *Leucozonia*. The functional significance of the



Explanation to *Latirus* figures 1-11 on opposite page

reduced medial node of the lateral tooth of the *Leucozonia*-type radula is not known, and its use as a phylogenetic character is slightly questionable due to the limited amount of material available for study.

### Genus *Latirus* Montfort, 1810

*Latirus* Montfort, 1810, Conchyliologie systématique et classification méthodique des coquilles 2: 531. Type species, *Latirus aurantiacus* Montfort, 1810, by monotypy [= *L. gibbulus* (Gmelin, 1791)].

*Chascax* R. Watson, 1873, Proc. Zool. Soc. London for 1873: 361. Type species, *Chascax maderensis* Watson, 1873, by monotypy [= *Latirus armatus* A. Adams, 1855]; non *Chascax* Ritgen, 1828 (Reptilia).

*Hemipolygona* Rovereto, 1899, Atti Soc. Ligust. 10:104 (new name for *Chascax* Watson, 1873).

[?] *Ruscula* Casey, 1904, Trans. Acad. Sci. St. Louis 14: 161. Type species, designated by Palmer (1937), *Fusus plicata* Lea.

### Subgenus *Latirus* s.s.

*Latirus (Latirus) cariniferus* (Lamarck, 1816)  
Figs. 2-6, 9, 11, 18, 22

1816 *Fusus cariniferus* Lamarck, Encyclopédie méthodique, pl. 423, fig. 3. Name and figure only; locality unknown. Type locality herein

designated to be Cienfuegos, Cuba. Type not in Musée d'Histoire naturelle, Geneva.

1855 *Latirus distinctus* A. Adams, Proc. Zool. Soc. London for 1854: 314. Locality unknown; type locality herein designated to be off Washerwomans Shoals, Key West, Florida. Lectotype, herein selected, BMNH 196738/1 (see Fig. 2).

1874 *Plicatella trochlearis* Kobelt, [in] Martini-Chemnitz, Syst. Conch.-Cab. 3 (3A): 79, pl. 19, figs. 1, 2. Type locality: St. Jan [= St. Johns, Virgin Islands]. Location of type unknown.

1939 *Latirus mcgintyi* Pilsbry, Nautilus 52: 84, pl. 5, fig. 8. Type locality: Lake Worth, Palm Beach Co., Florida. Holotype ANSP 173960.

*Description:* Shell highly variable, heavy, up to 73 mm in length and 36.8 mm in greatest diameter. Whorls 8-9, including 1½ whorls of the protoconch. Spire about half the length of the shell, but sometimes slightly less. Aperture almost square and twice as long as the short, thick siphonal canal. Axial sculpture of 8-9 moderately pronounced, squarish ribs. Spiral sculpture of heavy cords which begin at the shoulder of the whorl and continue anteriorly to the tip of the siphonal canal. 2-3 cords visible on the upper whorls, 5 on the body whorl, the 2 lowest closer together and being characteristic of this species. Between spiral cords 6-7 fine threads usually present but may

FIG. 1. *Latirus nematus* Woodring, Holotype, USNM 369442. Miocene of Bowden, Jamaica. 1.6X.

FIG. 2. *Latirus cariniferus* (Lamarck), Lectotype of *Latirus distinctus* A. Adams, BMNH 196738/1. 1.7X. Photograph courtesy of the British Museum (Natural History).

FIG. 3. *Latirus cariniferus* (Lamarck), Steger collection no. 416. Matanzas, Cuba. 1.3X.

FIG. 4. *Latirus cariniferus* (Lamarck). USNM 364362. Vicinity of Cartagena, Colombia. 1.5X.

FIG. 5. *Latirus cariniferus* (Lamarck). Type figure of *Fusus cariniferus* Lamarck, Encycl. Méth. pl. 423, fig. 3. 1.1X.

FIG. 6. *Latirus cariniferus* (Lamarck). USNM

589534. Colon, Panama. 1.5X.

FIG. 7. *Latirus angulatus* (Röding), Type figure of *Fusus angulatus* Röding, Syst. Conch.-Cab. 4, fig. 1315. 1.2 X.

FIG. 8. *Latirus angulatus* (Röding), specimen in MCZ. Just E. of Piscadera baai, Curaçao, Netherlands Antilles. 1.3X.

FIG. 9. *Latirus cariniferus* (Lamarck). AMNH 100575. W. of Cedar Key, Florida, 20 fms. 1.2 X.

FIG. 10. *Latirus angulatus* (Röding). AMNH 125489. Curaçao, Netherlands Antilles, 6 fms. 1.1 X.

FIG. 11. *Latirus cariniferus* (Lamarck). MCZ 234474. Cienfuegos, Cuba. 1.3X.

be entirely absent. Sutural ramp devoid of major cords, although possibly with numerous spiral threads; at times this area is completely smooth. Columella with 2 folds with a weaker one below; occasionally 4 strong folds. Outer lip crenulated due to spiral sculpture. Within the lip are 13-22 irregular lirae which may be very weak. Fasciole present, sometimes very pronounced. Anal canal partially developed.

Color white, yellow, or light cream-orange. Spiral cords usually the same color as shell, but at times white. Many specimens, but not all, with a reddish brown bar between each axial rib of the earlier whorls. Some specimens have brown between the white spiral cords. Periostracum thin and light brown.

*Remarks:* This is a highly variable species, but the two conspicuous, heavy, contiguous spiral cords at the base of the body whorl serve to distinguish it from all other *Latirus*. This characteristic is observed in Lamarck's figure of *Fusus cariniferus* (Fig. 5), a name which has been overlooked by recent authors and misunderstood by earlier ones such as Paetel (1873, 1888), Tryon (1881), and Melvill (1891).

Deshayes & Milne Edwards (1843) mentioned that Lamarck had confused *Turbinella spinosa* Martyn with this species; they restricted the name *cariniferus* to the species figured by Lamarck in the Encyclopédie Méthodique.

The well-known names *megintyi* Pilsbry, *trochlearis* Kobelt, and *distinctus* A. Adams are all herein synonymized with *cariniferus* since they represent only a few of the many variations exhibited by this species. The shell of

*cariniferus* is somewhat similar to *Latirus armatus* A. Adams of the eastern Atlantic and an un-named species from Somalia; both, however, lack the two prominent contiguous spiral cords at the base of the body whorl. Only two western Atlantic specimens have been observed which lack the contiguous cords (ANSP 314265, La Gonave Id., Haiti). Tryon (1881) erroneously mentioned *Chascax maderensis* Watson [= *Latirus armatus* A. Adams] as a West Indian species.

Radular studies reveal that *L. cariniferus* is probably more closely related to *L. tumens* Carpenter from the Panamic Province than to *armatus*. The only other member of *Latirus* s.s. from the Caribbean is *L. varai* Bullock, 1970, which may easily be differentiated by its stronger spiral sculpture, more rounded whorls, and chestnut brown coloration on the axial ribs, not between them.

The fossil record of *cariniferus*-like *Latirus* is incomplete and known mostly from the Pliocene. Pilsbry (1939) described *L. maxwelli*, which differs from *cariniferus* by having stronger spiral cords and less pronounced axial ribs. *Latirus anapetes* Woodring, 1964, from the Chagres Sandstone (Pliocene) of Panama is also an early representative of *cariniferus*, differing by being more attenuate and having strong spiral cords. Woodring compared *anapetes* with a very closely related species, *taurus* Olsson, 1922, from the Gatun Formation of the Toro cays.

*Distribution:* From Palm Beach and the west coast of Florida in the north, this species ex-

FIGS. 12, 19. *Latirus nematus* Woodring, USNM 414931. Bear Cut, Miami, Florida, 25 fms. 12, 2.2X; 19, 1.9X.

FIG. 13. *Latirus* (Polygona) *bernadensis* Bullock, n. sp., Holotype, MCZ 275428. Barbados Island, Lesser Antilles. 2X.

FIG. 14. *Latirus infundibulum* (Gmelin), Finlay collection. Aguadilla, Puerto Rico. 1.2X.

FIG. 15. *Latirus infundibulum* (Gmelin), AMNH 115203. From fish traps in 10 fms., Guantanamo Bay, Cuba. 1.3X.

FIG. 16. *Latirus angulatus* (Röding), USNM 663740. Water Id., Virgin Islands. 2.2X.

FIG. 17. *Latirus angulatus* (Röding), USNM

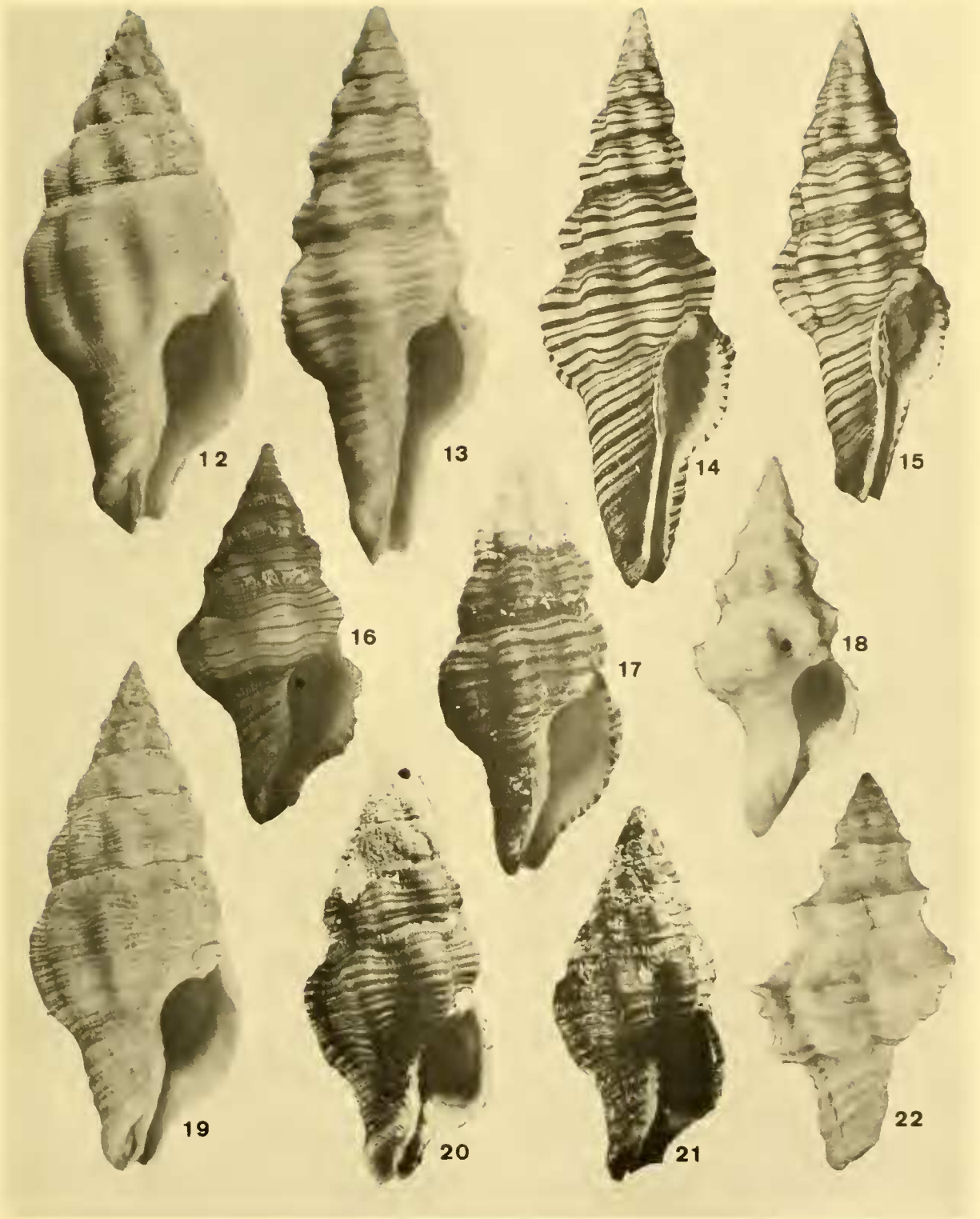
414897. Cardenas Bay, Cuba, 1-3 fms. 2.1X.

FIG. 18. *Latirus cariniferus* (Lamarck), Finlay collection. Off Gibara, Oriente, Cuba, 100 fms. 1.3X.

FIG. 20. *Latirus angulatus* (Röding), AMNH 140148. Off Fortaleza, Ceará, Brazil, 12 fms. 2.2X.

FIG. 21. *Latirus angulatus* (Röding), specimen in MCZ. N. coast of South America, dredged. 2.3X.

FIG. 22. *Latirus cariniferus* (Lamarck), D'Attilio collection no. 1344. Cienfuegos Harbor, Cuba. 0.8X.



Explanation to *Latirus* figures 12-22 on opposite page

tends throughout the West Indies, and from Yucatan, Mexico, to the northern coast of South America, from shallow water to over 100 fathoms.

### Subgenus *Polygona* Schumacher, 1817

*Polygona* Schumacher, 1817, Essai d'un nouveau système des habitations des vers testacés, pp. 73, 241. Type species, *Polygona fusiformis* Schumacher, 1817, by monotypy [= *Latirus infundibulum* (Gmelin, 1791)].

*Plicatella* Swainson, 1840, Treatise on malacology, pp. 78, 304. An unnecessary new name for *Polygona* Schumacher.

*Remarks:* As Woodring (1928) mentioned, *Latirus infundibulum* (Figs. 14, 15) is extremely different from *L. gibbulus*, the type species of *Latirus*. But Woodring admitted that in terms of shell morphology there exist species intermediate between *Latirus* s.s. and *Polygona*. The latter differs from *Latirus* by being smaller, relatively more narrow, having a well developed siphonal canal, and usually with pronounced brown, rather than white, spiral cords. It seems wise at this time to retain the use of *Polygona* at the subgeneric level only.

Species referable to *Polygona* appear commonly in the Miocene of the Caribbean region. This group, as with other *Latirus*, includes some species having a high degree of intraspecific variation of shell characters. Recent West Indian species of *Polygona* include *infundibulum* (Gmelin), *angulatus* (Röding), *nematus* Woodring, and *bernadensis* Bullock, n. sp.; *hemphilli* Hertlein & Strong, *concentricus* (Reeve), and *praestantior* Melvill are eastern Pacific representatives.

### *Latirus (Polygona) angulatus* (Röding, 1798)

Figs. 7, 8, 10, 16, 17, 20, 21, 24-26

1798 *Fusus angulatus* Röding, Museum Boltianum, p. 118, sp. 1527. Locality not mentioned; type locality herein designated to be San Juan baai, Curacao, Netherlands Antilles. Location of type unknown.

1847 *Turbinella brevicaudata* Reeve, Conchologia Iconica 4, *Turbinella* pl. 10, sp. 50. Locality

unknown; figured specimen in BMNH. A doubtful synonym of *Latirus angulatus*.

1847 *Turbinella spadicea* Reeve, Conchologia Iconica 4, *Turbinella* pl. 9, sp. 44. Locality unknown. Possible syntypes in BMNH.

1940 *Latirus cymatius* Schwengel, Nautilus 53: 110, pl. 12, figs. 6, 7. Type locality: off Palm Beach, in about 12 fms. Holotype ANSP 175132. Misspelled *cymatias* on p. 110, but correctly on plate caption.

*Description:* Shell small to large, up to 76.5 mm in length and 34 mm in greatest diameter. Spire usually more than half the length of the shell, but sometimes less. Whorls 9-10; protoconch-consisting of 2 whorls. Aperture oval to squarish and greater in length than the short siphonal canal. Axial sculpture of 7-8 squarish ribs which often are more pronounced just below the shoulder of the whorl. Numerous fine growth lines usually very conspicuous at the suture. Spiral sculpture of 8-10 heavy cords, 4-5 showing on the upper whorls, interspaced with secondary, and sometimes tertiary, threads. Columella with 3 folds and a weaker one below. Outer lip crenulated, the indentations corresponding to the spiral sculpture. Within the lip 7-12 lirae run into the aperture. Fasciole present. Anal canal partially developed.

Color light cream-orange to brown. Spiral cords and threads reddish brown or at times the color of the shell. Shell occasionally banded with light reddish brown. Periostracum very thin, light brown.

*Remarks:* Much taxonomic confusion has existed concerning *Latirus angulatus*. An indication of the problems associated with this species first came when T. L. McGinty (1966, *in litt.* to Dr. R. D. Turner of Harvard University), who had been working on *Latirus*, stated that the well known name *brevicaudatus* could refer to a Pacific species. A study of many hundreds of West Indian specimens has resulted in the conclusion that this relatively common species exhibits more intraspecific variation than any other *Latirus* I have observed, and not one of the many forms can be compared easily with the clear figure in Reeve (1847) or a photograph of the specimen provided me (Fig. 23) by Dr. Norman Tebble, the former curator

of the Mollusca section of the British Museum (Natural History). When I had the opportunity to examine the figured specimen first hand, I found the Reeve figure to be an exceptionally good one. An additional complication developed when it became apparent that the figured type of *brevicaudatus* seemed to have much in common with a few Indo-Pacific specimens labelled "*Latirus lyratus* Rve." in some museum collections. The problem remained: what should be done in this particular case, especially since the name *brevicaudatus* was prevalent, in spite of the other names applied to this species?

The "type lot" of *brevicaudatus* includes three specimens. In addition to the previously mentioned figured type, there are two specimens (Figs. 24, 26) that are clearly referable to the Virgin Island form of "*brevicaudatus*" (Fig. 16). These two specimens are so very different from the figured specimen that I find it hard to believe that Reeve had access to them when he was completing the *Turbinella* section of the *Conchologia Iconica*. I feel it is likely that these two specimens were added to the type lot at a later date.

There are four possible courses of action one could take in this particular case: 1) conserve the name *brevicaudatus* for the West Indian species by continuing to accept the figured type as the Caribbean species, 2) conserve the name *brevicaudatus* by ignoring the figured type and declaring one of the other specimens to be the lectotype, 3) avoid the entire problem by using an earlier name, 4) petition the Commission on International Zoological Nomenclature to invalidate the existing types and establish a neotype based on a typical example of *brevicaudatus*. But to conserve the name *brevicaudatus* for the Caribbean species would make it unavailable for future use should it be found that *brevicaudatus* actually occurs in the Indo-Pacific, which seems likely, or in the eastern Atlantic, where it has been reported by Nordsieck (1968).

If one is willing to accept a change of name for this West Indian species, the easiest choice is to use the next available name. But both names from the literature that could be used for this species, *spadiceus* (Reeve, 1847) and *cymatius* Schwengel, 1940, do not represent

typical forms, and since the great intraspecific variation observed is still not clearly understood, the use of these names might institute confusion. A better solution does exist, however. In the Museum Boltenianum, using the name *Fusus angulatus*, Röding (1798) made reference to a certain specimen figured by Chemnitz (my Fig. 7) in the *Systematisches Conchylien-Cabinet* (vol. 4, figs. 1314, 1315). These two figures, which have been cited repetitiously by earlier authors as two of a number of figures of *Latirus polygonus* (Gmelin, 1791), are definitely not conspecific with Gmelin's abundant and well understood Indo-Pacific species; they represent a large "*brevicaudatus*" nearly identical to a typical form occurring in the southern Caribbean (compare Figs. 7, 8, and 10). The mention by Chemnitz of brown spiral threads is especially convincing.

Because of the uncertainty regarding the use of the name *brevicaudatus* for the Caribbean species, and because some typical West Indian forms closely match the Chemnitz figure, I have decided, with more than a little reluctance, to

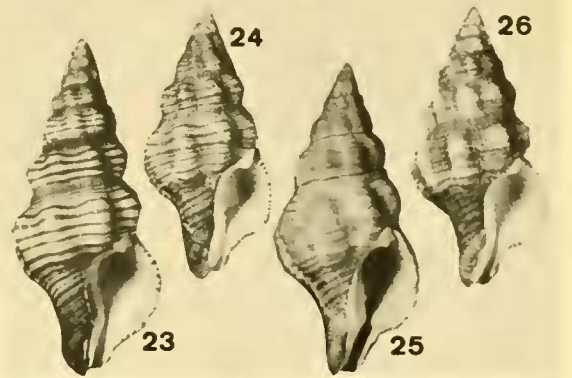


FIG. 23. *Latirus brevicaudatus* (Reeve), Figured type. Locality unknown. 1X. Photograph courtesy of the British Museum (Natural History).

FIGS. 24, 26. *Latirus angulatus* (Röding). "paratypes" of *Turbinella brevicaudata* Reeve. Locality unknown. 1X. Photographs courtesy of the British Museum (Natural History).

FIG. 25. *Latirus angulatus* (Röding), possible syntype of *Turbinella spadicea* Reeve, fide Dr. Norman Tebble. Locality unknown. 1X. Photograph courtesy of the British Museum (Natural History).

propose the use of the name *angulatus* (Röding, 1798) for this species. It is felt that the establishment of the name *angulatus* will prove not only to have been an expedient move, but one that will have promoted nomenclatorial stability, one of the ultimate goals of most taxonomists.

As previously mentioned, *Latirus angulatus* exhibits a great amount of intraspecific variation. Typical *angulatus*, similar to the "paratypes" of *brevicaudatus*, occur on St. Thomas and St. Johns, Virgin Islands (Fig. 16), and in the Bahama Islands. The Lesser Antilles afford the largest *angulatus* known, those from Curacao (Figs. 8, 10) being especially large and identical to the figure in Chemnitz (my Fig. 7); these differ from the typical form only in the adult, which has somewhat more swollen whorls and slightly more squarish axial ribs. The frilled sutural region of Curaçao specimens (mentioned by Benthem Jutting, 1920) and those from off Florida (Schwengel, 1940) is characteristic of most *angulatus*, as well as many other *Latirus*, and its expression is probably dependent upon environmental conditions.

Major variations of *angulatus* occur throughout the rest of its range. Several specimens from South America show very heavy spiral sculpture and a relatively small aperture (Figs. 20, 21). *L. cymatius* Schwengel from Florida is closer to typical *angulatus* than many of the other variations, and it is herein considered conspecific with *angulatus*. The type specimens of *cymatius* are unicolored Sayal brown and heavy-shelled; most specimens examined were immature. Numerous forms of *angulatus* occur along the northern coast of Cuba (one such form, Fig. 17).

The identity of *Latirus spadiceus* (Reeve, 1847) (Fig. 25) remains a little uncertain, although I feel certain that some specimens of *Latirus angulatus* will eventually be collected that will show *spadiceus* to be conspecific with *angulatus*. Hertlein & Strong (1951) and Keen (1971) stated that the west American *Latirus hemphilli* Hertlein & Strong, 1951, was the *spadiceus* of authors, but not of Reeve. Some older museum collections have some *angulatus* specimens from unknown locality which seem referable to *spadiceus* Reeve.

Some Miocene and Pliocene *Latirus* appear to be possible ancestors of *angulatus*. The closest relative, *L. angulatus santodomingensis* Pilsbry from the Miocene of the Dominican Republic, differs from typical *angulatus* by having a shorter, wider siphonal canal and a sharp angulation of the axial ribs. Pilsbry's description fits some Recent *angulatus*, and a few specimens (fossil?) dredged from the harbor at Roosevelt Roads Naval Base, Puerto Rico, appear to be intermediate between these two subspecies.

*Distribution:* From the lower east coast of Florida and the Bahama Islands in the north, this species is found throughout the West Indian Province, from Yucatan, Mexico, and Cuba to the Lesser Antilles and Brazil. Peile (1927) recorded a "*Latirus* sp. near *sanguifluus*, Rve." from Bermuda, but I have been unable to locate his specimen. Recently, Waller (1973) collected *Latirus angulatus* off the south shore of Tucker's Town, Bermuda, 51 meters depth. Nord-sieck (1968) reported this species from the west coast of Africa, but the present author has seen no eastern Atlantic specimens and cannot verify this record.

*Latirus (Polygonia) bernadensis* Bullock,  
new species

Fig. 13

*Description:* Shell small to medium in size, up to 44.2 mm in length and 16.5 mm in greatest diameter. Spire slightly greater than half the length of the shell. Aperture oval to squarish and as long or slightly longer than the moderately long siphonal canal. Whorls 9. Axial sculpture of 7 broad ribs which are slightly more pronounced on the shoulder of the whorl. Spiral sculpture of about 8 cords with occasional secondary cords between; 4-5 cords show on the upper whorls, and a number of cords, some stronger than others, are prominent on the siphonal canal. Columella with 3 folds with a weaker fold above and below these. Outer lip crenulate due to the spiral sculpture; within the lip 6-9 lirae run into the aperture. Periostracum thin, light brown. Shell light cream-orange, including the spiral cords. Aperture slightly lighter in color.



*Measurements:* Holotype 44.2 mm in length, 16.5 mm in greatest diameter; paratypes (both from the type locality) 36.7 and 36.4 mm in length.

*Type Locality:* Barbados, Lesser Antilles.

*Location of Types:* Holotype, Museum of Comparative Zoology, Harvard University, 275428; two paratypes, Mus. Comp. Zool. 275429.

*Remarks:* When compared with other West Indian *Latirus*, *bernadensis* appears most similar to *L. infundibulum* (Gmelin, 1791), but differs by being relatively stouter, having broader axial ribs, and lacking the brown coloration on the stronger spiral cords. *L. praestantior* Melvill, 1892, from West Mexico is closely related, but its spiral sculpture is not as strong, especially on the body whorl. This species is named after Bernados Island, a name for Barbados appearing on an early sixteenth century manuscript chart located in the British Museum.

*Latirus (Polygonia) nematus* Woodring, 1928

Figs. 1, 12, 19

1928 *Latirus (Polygonia) nematus* Woodring, Miocene mollusks from Bowden, Jamaica. Part II, Gastropods and discussion of results, p. 254, pl. 15, fig. 6. Type locality: Bowden Formation [Miocene], Jamaica. Holotype USNM 369442.

*Description:* Shell moderately large, up to 60.4 mm in length, 23 mm in diameter. Spire usually about half the length of the shell, but sometimes less. Whorls 10, including 1½ whorls of the protoconch, which is often broken off or eroded. Aperture oval and larger than the rather short siphonal canal. Axial sculpture of 8-11 ribs. Numerous fine growth lines are present. Spiral sculpture of many cords, usually of even thickness, but occasionally showing some secondary cords. In the region below the shoulder and on the body whorl of some specimens, the crossing of the growth lines and the spiral cords gives the shell a cancellate appearance. Columellar folds 4, with the lower 2 partially fused. Outer lip minutely crenulate with the formation of small teeth arranged in pairs. Within the lip 10-14 irregular lirae run into the aperture, the anterior one thickened

and corresponding to the most anterior columellar fold and appearing to almost close the apertural entrance to the siphonal canal. Fasciole well developed; pseudoumbilicus slit-like. Anal canal well defined.

Shell light cream-orange to almost white with light orange on the siphonal canal, and occasionally partially banded with reddish brown. Early whorls Sayal brown. Aperture yellowish white; columella light orange. Periostracum thin and light greenish brown.

*Remarks:* *Latirus nematus* previously was known only from the Bowden Formation, and this marks the first time it has been reported from the Recent fauna. The Recent specimens I examined do differ in some respects from the fossil form, particularly when immature specimens are compared, and I at first thought that perhaps they were specifically or sub-specifically distinct. Most Recent specimens are immature and exhibit quite inflated whorls; the immature paratypes of *nematus* do not have inflated whorls, and are more elongate. It seems best in this case to delay introduction of an additional name until more material, both fossil and Recent, is available for study.

When compared with other species, *nematus* can possibly only be confused with some forms of *angulatus*. The latter species usually can be differentiated easily by its stronger spiral cords, often with intermediate secondary cords which are usually brown in color. In addition, the axial ribs tend to be somewhat round. In *nematus*, the spiral cords are fine and more numerous, lack color, and the axial ribs are more squarish in outline.

*Distribution:* Known only in the Recent fauna from off Miami, Florida, and Gibara, Oriente, Cuba. Usticke (pers. comm.) has a specimen from the north coast of Puerto Rico which is probably this species.

*Specimens Examined:* FLORIDA: Miami; Miami, 20 fms.; Bear Cut, Miami, 25 fms. (all USNM). CUBA: off Gibara, Oriente (Finlay collection).

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